Pro 200 Series
QuickStart Guide

The furnace weighs approximately 50 pounds (25 kg). A four wheeled platform cart is recommended if the final destination is more than a few feet away. Position the furnace with the Main Power Switch closest to the front edge of its current surface. Slide one arm just underneath the table lift arm as close to the chassis as possible. Use your other hand to grasp the back of the chassis just above the vacuum inlet fitting. Raise the furnace two inches, keeping it over the work surface until your back and arms confirm you are able to control the furnace without injuring yourself. Move slowly to the final location and reverse the sequence to place the furnace.

Before Unpacking

- **DO NOT** turn on AC Power until instructed to do so.
- Save all packing materials
- Ensure appropriate Power and Ventilation

Unpacking

- Open Box
- Remove Accessory Box
- Tilt box up and slide Furnace and fitted foam onto counter
- Remove Foam and Save Foam and Box
- Remove Orange Shipping Bar and Green Sheet
- Open Accessory Box
- Take Inventory

Connecting Power and Vacuum Pump

- Open Pump Box
- Connect Tubing to Pump – Observe Air Flow Arrows on Pump
- Connect output hose to Quick Cool Jet
- Connect input hose to Vacuum Barb
- Plug the Pump Power Cord into Furnace Outlet

Placement of the Furnace

Ensure Air Flow room and hoses not kinked
Place cooling tray nearby

Control and Display Familiarization

Front Panel Controls on Right Side of Panel

Rotary Detent Knob

- Rotating knob scrolls menu selections and changes parameter values
- Pressing center of knob selects menu items
- Up Arrow button raises lift table/firing tray
- Down Arrow button lowers lift table/firing tray
- Menu button brings up lists of main functions. Select a main function to enter list of secondary functions
- Abort button aborts a running program and lowers the lift table.

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Displays on Left Side of Panel

- Text Display shows menus, allows parameter editing, displays prompts.
- Firing Graph below text display monitors program in progress status.

Power On and Initial Setup

Turn on Power Switch at right rear corner of furnace.

Wait for the Self Diagnostic Program to run and the firing table to lower

- The display will present the “Main Menu”. Approximately 10 seconds later the table will lower to the down position.

Place the firing tray on the lift table seated over the centering pin.
Press the Up Arrow button to raise the table/tray and check for uniform table closure.

- **Note:** The first press will begin raising the table; if pressed a second time while the table is moving the table will stop moving; if pressed a third time the table will resume moving upward. (The same “pause” feature works with the Down Arrow button and downward motion.)

Setting Essential Preferences

The User Manual details all of the “**Special Functions**” preference settings, however there are three settings you will want to select right away, before you run your first Program. They are the Temperature Units, muffle Idle Temperature, and whether you want the Vacuum pump to run constantly or intermittently (draw a certain vacuum, then shut off and only run the pump during the program if the vacuum falls below a preset value.)

From the Main Menu, rotate the Knob until the “**Special Functions**” entry is indicated by the cursor. Press the Knob. If you wish to change the displayed Temperature Units, select **Special Functions**, then select “Temp in C or F”, then seclect “YES” to leave the furnace in Celcius, select “NO” to switch to Fahrenheit.

Now rotate the Knob until the “**Change Idle Temperature**” entry is indicated and press the Knob. You can set the value of the Idle temperature by rotating the Knob to the desired temperature, then
pressing the Knob to accept and store the value. You will be returned to the Main Menu after each Special Function edit is finished.

The default Vacuum mode is called “Intermittent”, where the pump runs to a default vacuum level of 71 cm of mercury, shuts off, and only restarts if the vacuum drops below the 71 cm level during the Program. If you want the vacuum pump to run constantly during the time the Program calls for vacuum, select the “**Constant Vac Pump**” Special Function and use the Knob to edit the setting to “Yes”. The “**Set Vacuum Level**” Special Function allows changing the default 71 cm cutoff vacuum to any value between 28 cm and 75 cm for the Intermittent Mode only.

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Entering Your First Program (at the Furnace)

Press the **Menu** button

Rotate the Knob until display cursor points to "**Change Program**"
You can either press the Knob inward to make the selection or press the "Next" button

Rotate the Knob until the display cursor points to "Add/Edit" program, then press Knob or Next button.

The cursor will point at text like "005-" on the first line of the display. (This is the program number)

Rotate the Knob to any unused program number (no text to the right of the XXX-) and press Knob to select it.

Number of Stages
Rotate/Press the Knob to select either a "1-STAGE" program or a "2-STAGE" program (1 rate rise, or 2 rate rise)

Program Name
You will be prompted to enter the Program Name by rotating the Knob to select each character, then pressing the Next button to accept the character and move to the right for the next one. If you want to change a previously entered character you can back up to the left by pressing the "Last" button and re-entering the character. Up to 15 characters/spaces can be used to name the program. When you are finished with the Program Name, press the Knob to continue with the next program parameter entry.

Single Stage Parameters
Hold Time – How long the muffle stays at the final firing temperature
Dry Time – The time it takes the table to reach the muffle.
Entry Temp – Muffle temperature when the table closes.
Rate Rise – The speed of temperature increase to the Hold Temperature
Hold Temp – The final firing temperature.
Fuse Adjust – Specific to each individual program, this value adds to or subtracts from the Hold temperature. This can be left at the default "0" value and edited as the need arises, if ever.
Table Down – After the Hold Time expires and heater cools down, the temperature the table opens at.
Cool Time – The time it takes the table to move downward to the full down position.
Use Vacuum? – Do you want vacuum during cycle
Use Argon? – For Pro 200, user can enable or disable Argon support from the Special Function menu. If the user enables the Argon support, user will see the Argon option when a new program is added. *Argon feature is not available for Pro Press 200*.
Vacuum Level- User defined vacuum level for intermittent vacuum operation

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Two Stage Parameters

Fuse Adjust – specific to each individual program, this value adds to or subtracts from the Hold temperature. This can be left at the default "0" value and edited as the need arises, if ever.

Dry Time – The time it takes the table to reach the muffle.

Entry Temp – Muffle temperature when the table closes.

Rate Rise 1 – The speed of temperature increase to the Hold Temperature

Hold Temp 1 – The first desired stable temperature.

Hold Time 1 – How long the muffle stays at the stable temperature

Rate Rise 2 – After Hold Time 1, a second increase in temperature to a new, higher level.

Hold Temp 2 – The final firing temperature.

Hold Time 2 – The length of time the temperature stays at the new, higher level.

Table Down – After the Hold Time expires and heater cools down, the temperature the table opens at.

Cool Time – The time it takes the table to move downward to the full down position.

Use Argon? – For Pro 200, user can enable or disable Argon support from the Special Function menu. If the user enables the Argon support, user will see the Argon option when a new program is added. *Argon feature is not available for Pro Press 200*.

Use Vacuum? – Do you want vacuum during cycle

Running Your First Program

After all the parameters have been entered you will automatically return to the Main Menu with the display cursor pointer to the "Run Program" entry. Press the knob or press the Next button to select Run Program mode. Rotate the Knob to select the number of the Program you wish to run, then press the Knob to start the Program. The Abort button will immediately terminate any running Programs and the temperature will fall to the Idle Temperature.

Adding Additional Programs

You can enter Programs, edit Programs, and save Programs on your PC (See the Pro 200 or Pro Press 200 Master Suite software or Quick Start Video for instructions)

Using the Flash Drive to Transfer Firing Programs

For more information on downloading programs onto the Flash Drive or uploading the programs into the Pro 200 Series Furnaces refer to the Pro 200 Series Manual

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